

image forming optical system comprises a nozzle adapted to selectively direct the discharge of said flow of pressurized gas from said channel across said image forming optical system.

5. An endoscope as recited in claim 1 wherein the length of said selectively controllable bendable section of said sheath member is in the range of 5 to 21 centimeters and the overall length of said sheath member is about 35 centimeters.

6. An endoscope comprising:

an elongated sheath member having distal and proximal ends adapted for introduction into a body cavity and having at its distal end a first selectively controllable bendable section having a length about one-third the overall length of said sheath member, said section housing an image forming optical system, said sheath member having at its proximal end a generally rigid section including a control housing;

an image transmitting optical system extending through said sheath member, said image transmitting optical system having forward and rearward ends, said forward end being operatively located behind and adjacent said image forming system, and said rearward end terminating in said control housing, said optical system being adapted to be operatively connected to a video system for viewing a transmitted image of an object on a television monitor, thereby permitting an object image formed by said optical system on the forward end of said optical system and transmitted to the rearward end to be viewed in both said proximal end portion and on a television monitor;

video recording means operatively connected to said rearward end of said optical system for recording said the transmitted image of an object onto a recording medium;

a light transmitting system extending through said sheath member, said light transmitting system having forward and rearward ends, said forward end operatively located adjacent said image forming optical system, and said rearward end terminating in said control housing, said light transmitting system being adapted to be operatively connected to a light source for providing illumination for objects to be visualized by said image forming optical system;

a channel extending through said sheath member, said channel having forward and rearward ends, said channel forward end being operatively located

adjacent said optical system, said channel rearward end terminating in said control housing and adapted to be operatively connected to a selectively controllable source of pressurized gas;

gas control means, including a directional nozzle member, operatively connected to said channel forward end for directing a flow of pressurized gas across said optical system to keep said optical system operationally clear; and

control means operatively connected to said first selectively controllable bendable section for manipulating said distal end portion of said sheath member.

7. An intubation process using an endoscope with an intubating sheath member having both flexible and rigid sections and said endoscope further having a video imaging system connected to video monitoring and display means and a channel for applying a gas to the distal end of the endoscope, in association with an endotracheal tube having an inflatable cuff, the process comprising the steps of:

- (1) placing the endoscope through the central lumen of the endotracheal tube;
- (2) inserting the distal end of the endoscope into the oral cavity of a subject;
- (3) using the video imaging system and the video monitoring means, positioning the distal end of the endoscope through the larynx to a selected location near the tracheal bifurcation;
- (4) using the video imaging system and the video monitoring and display means, guiding the endotracheal tube over the endoscope toward the distal end of the endoscope to insure that the distal end of the endotracheal tube does not extend beyond that of the endoscope;
- (5) inflating the inflatable cuff to hold the endotracheal tube in position; and
- (6) withdrawing the endoscope from the trachea and the central lumen of the endotracheal tube.

8. An intubation process as recited in claim 7 further including the step of:

applying a gas to the channel and directing the gas exiting from the channel across the video imaging system to keep the video imaging system clear.

9. An intubation process as recited in claim 7 further including the step of:

applying and controlling a gas flow through the channel to ensure diffusion oxygenation of said subject during the intubation process.

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